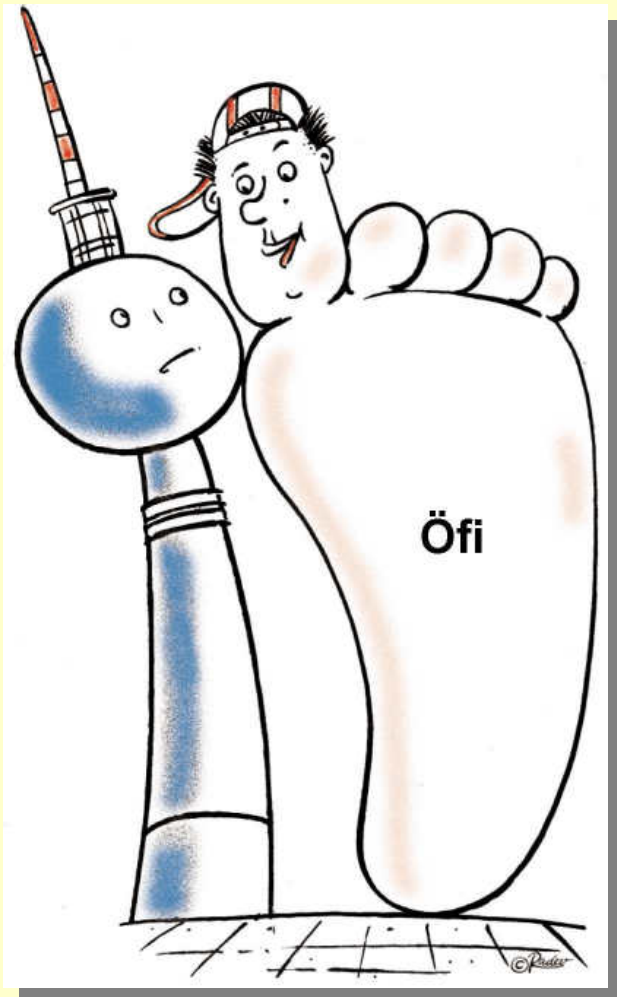
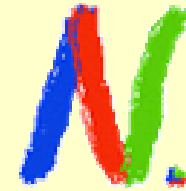




**Der Ökologische
Fußabdruck
Anwendbarkeit
und Aussagekraft
für die Länderebene**

VISIT...

LANZAROTE
Caliente.COM

Anwendungsgebiete des Ökologischen Fußabdrucks



1. Erläuterung des ÖF



2. globale und Länder-Ebene



3. regionale/kommunale Ebene



4. Maßnahmen und Handlungsebene



5. Anwendungen für Brandenburg



Der ökologische Fußabdruck



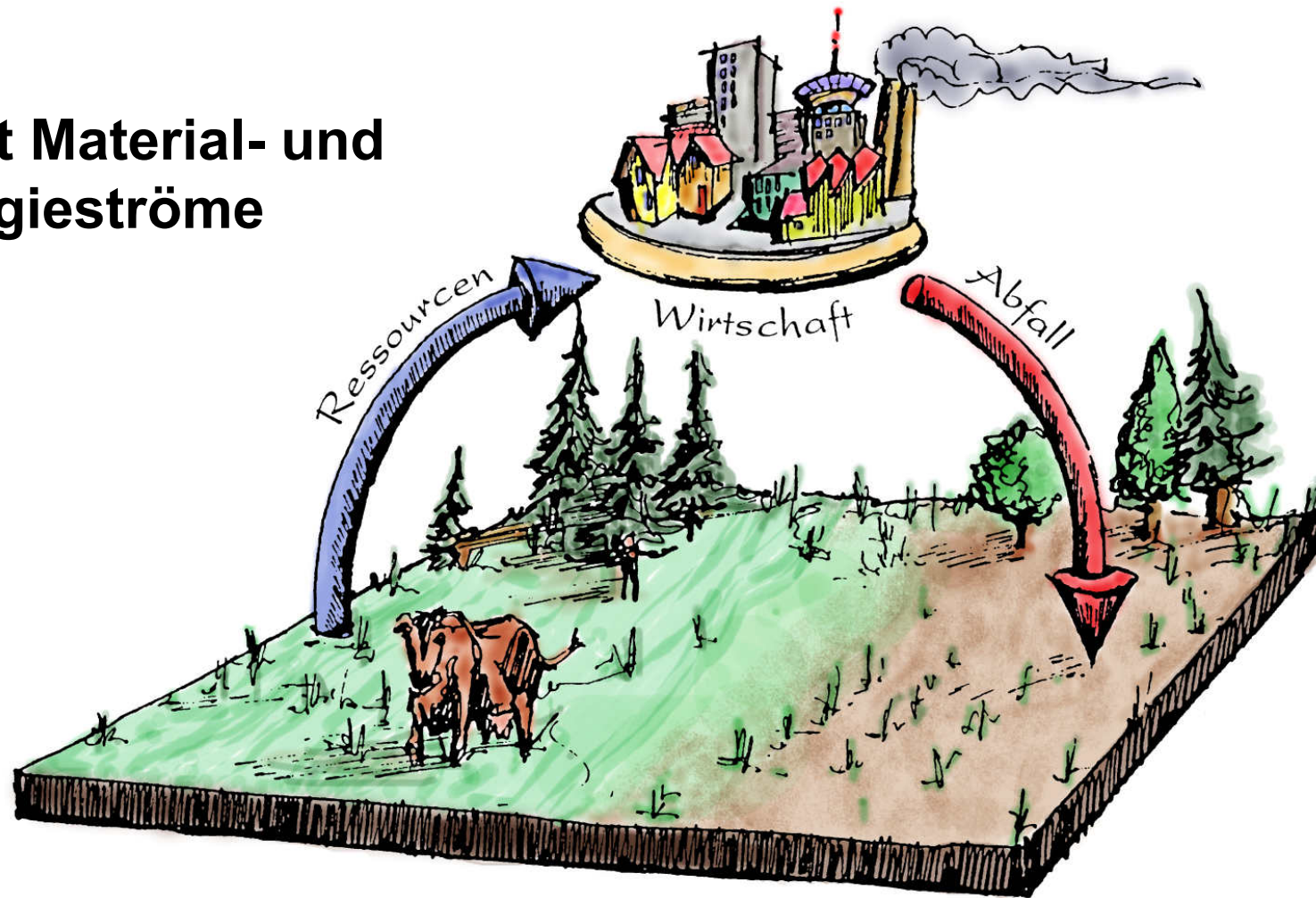
**Welche Naturfläche
beansprucht unser Konsum**



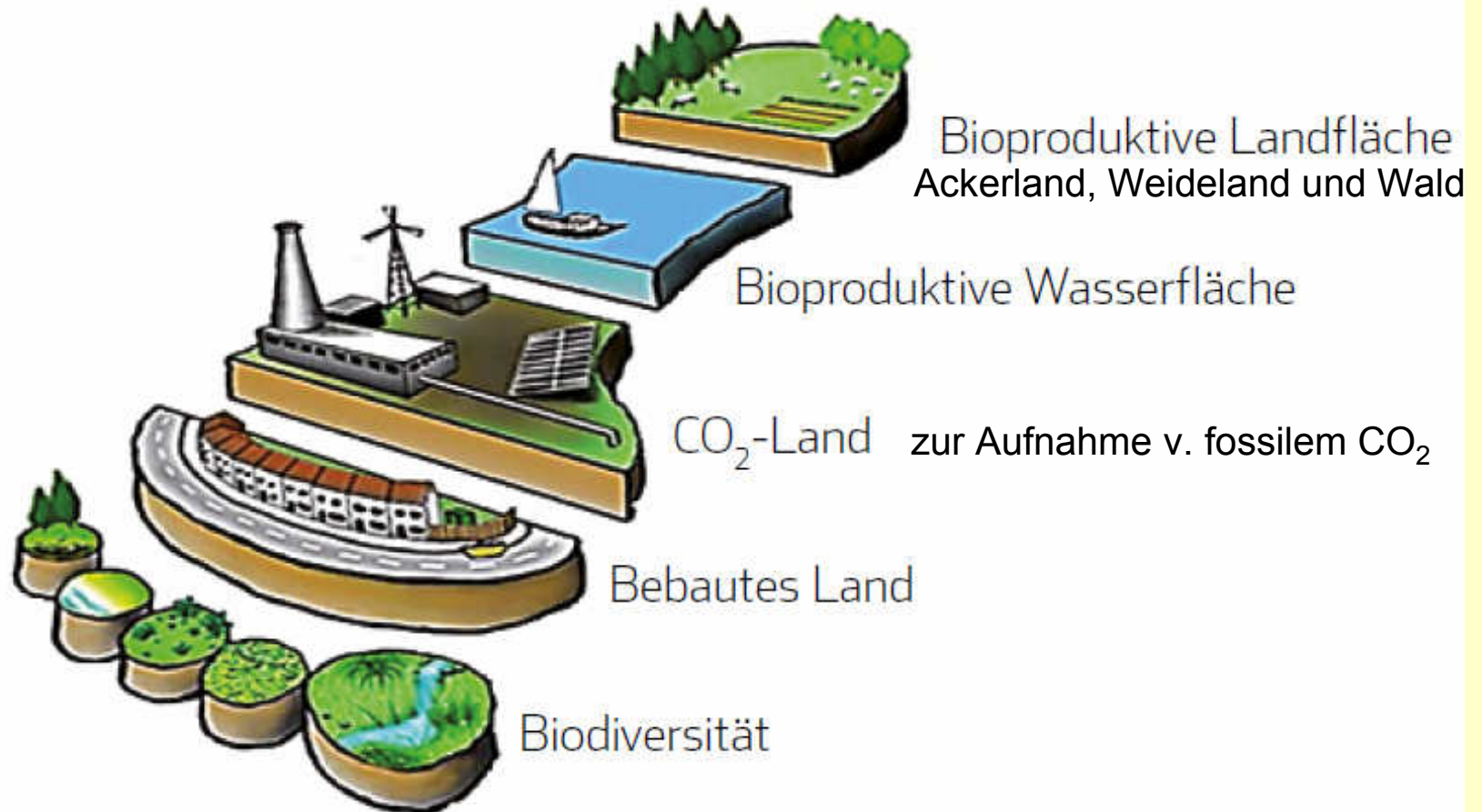
Der ökologische Fußabdruck



misst Material- und
Energieströme



Flächentypen

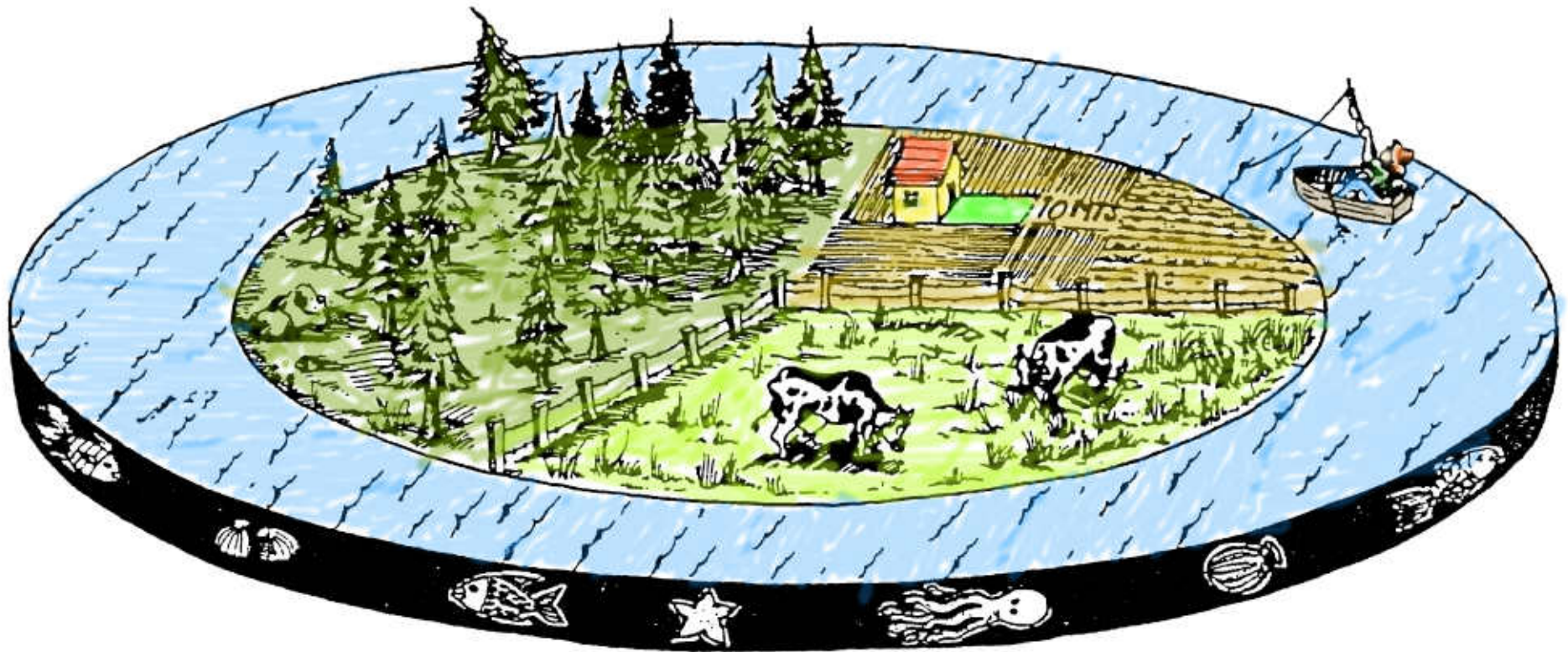


Vereinheitlichung der Flächen und Darstellung als „globale Hektar“ [gh]

Die nutzbare Naturfläche „Biokapazität“ – das Dargebot



ca. 1,7 Hektar = **2,5 Fußballfelder**
für jeden Menschen auf der Erde:



Bedarf und Dargebot



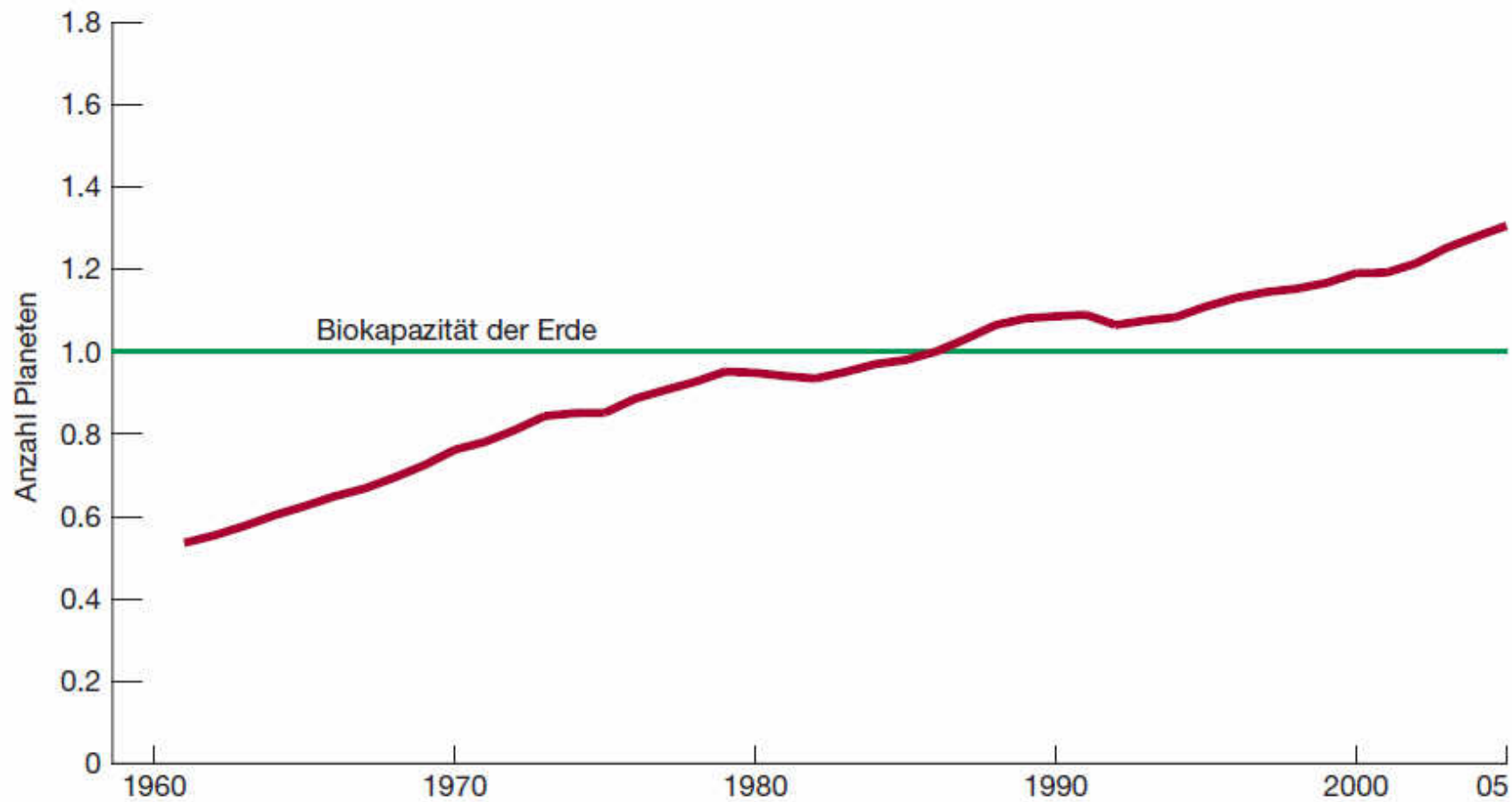
So viel beanspruchen wir:



Mehr als zur Verfügung steht!



Abb. 2: ÖKOLOGISCHER FUSSABDRUCK DER MENSCHHEIT, 1961-2005



Quelle:
Living Planet Report 2008
Bearbeitet: Schnauss



Abb. 24: **ÖKOLOGISCHER FUSSABDRUCK NACH LÄNDERN, 1961-2005**

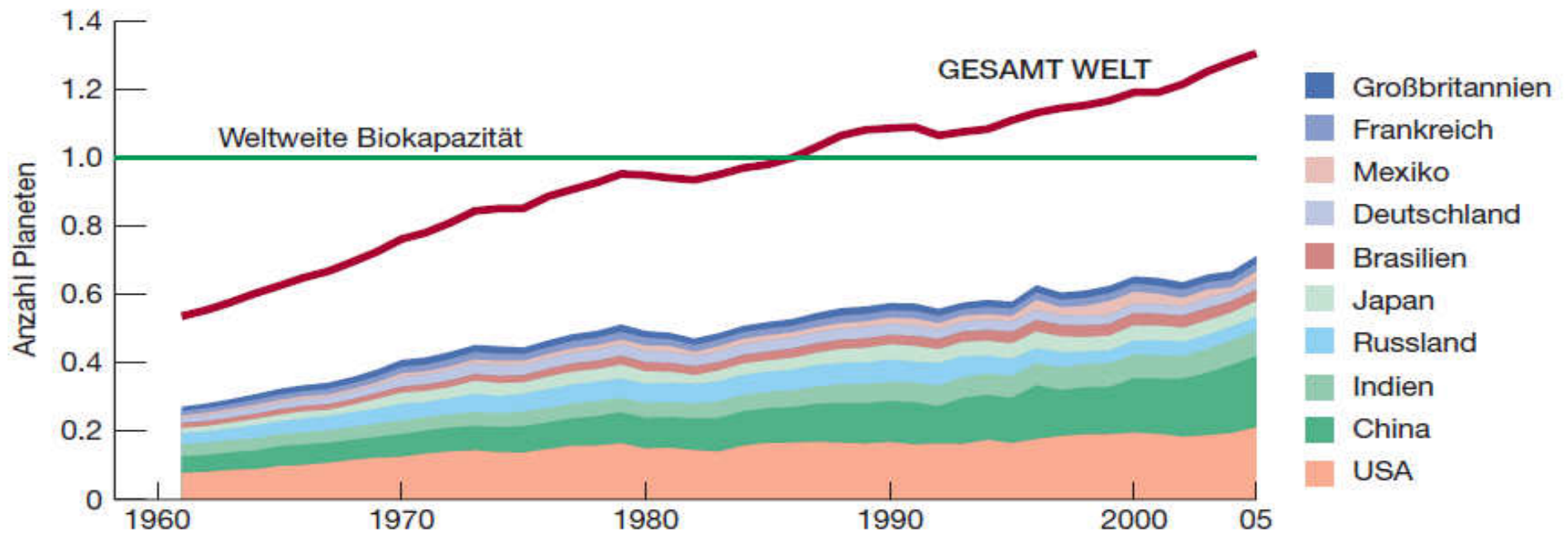
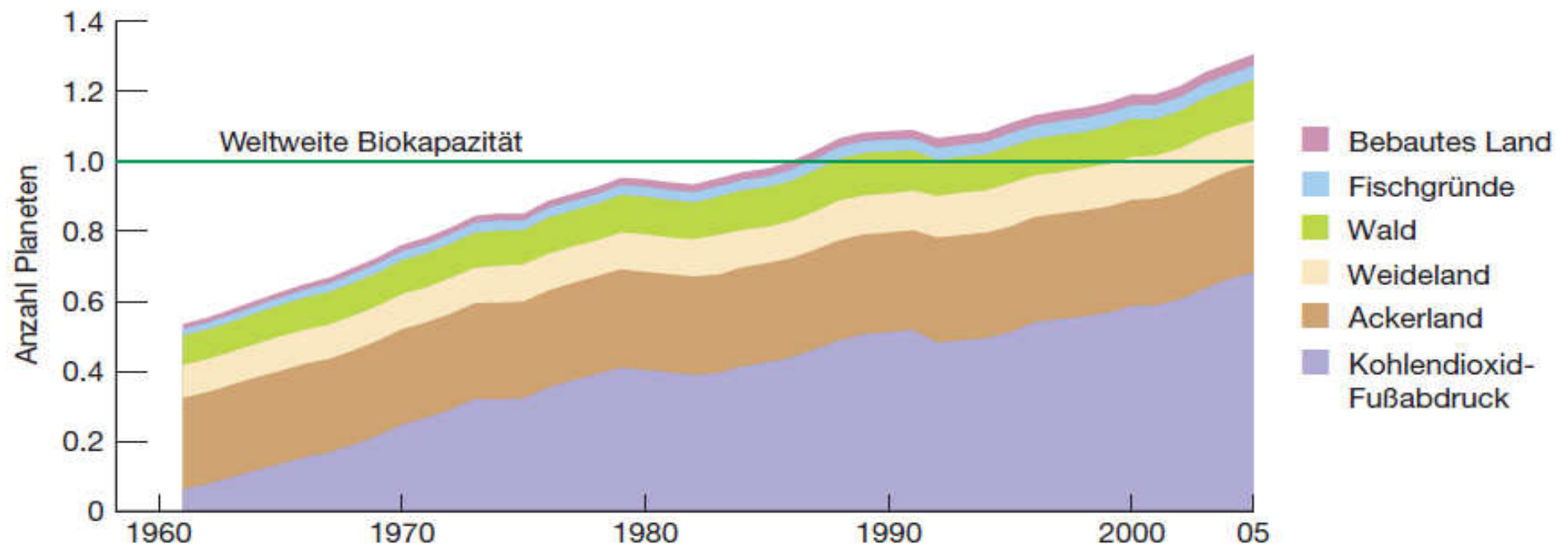
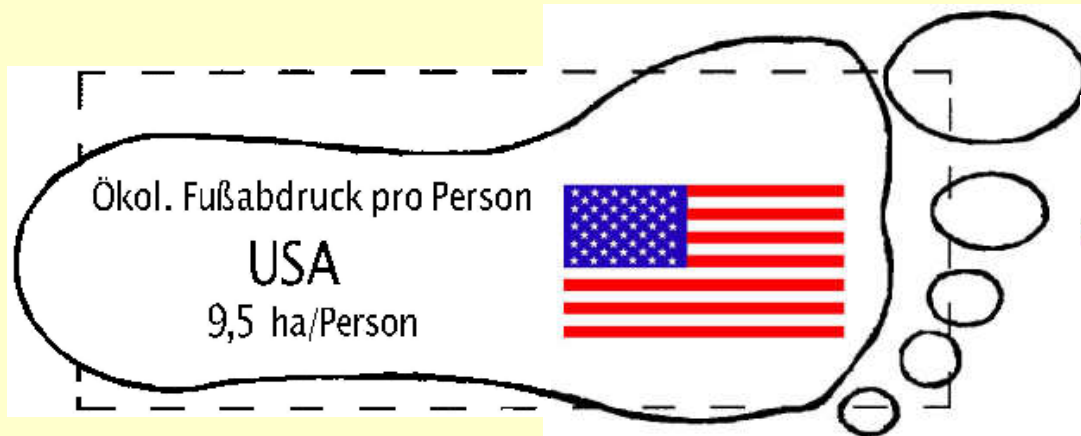




Abb. 23: **ÖKOLOGISCHER FUSSABDRUCK NACH BESTANDTEILEN, 1961-2005**





Deutschland 1,9 Defizit 2,9

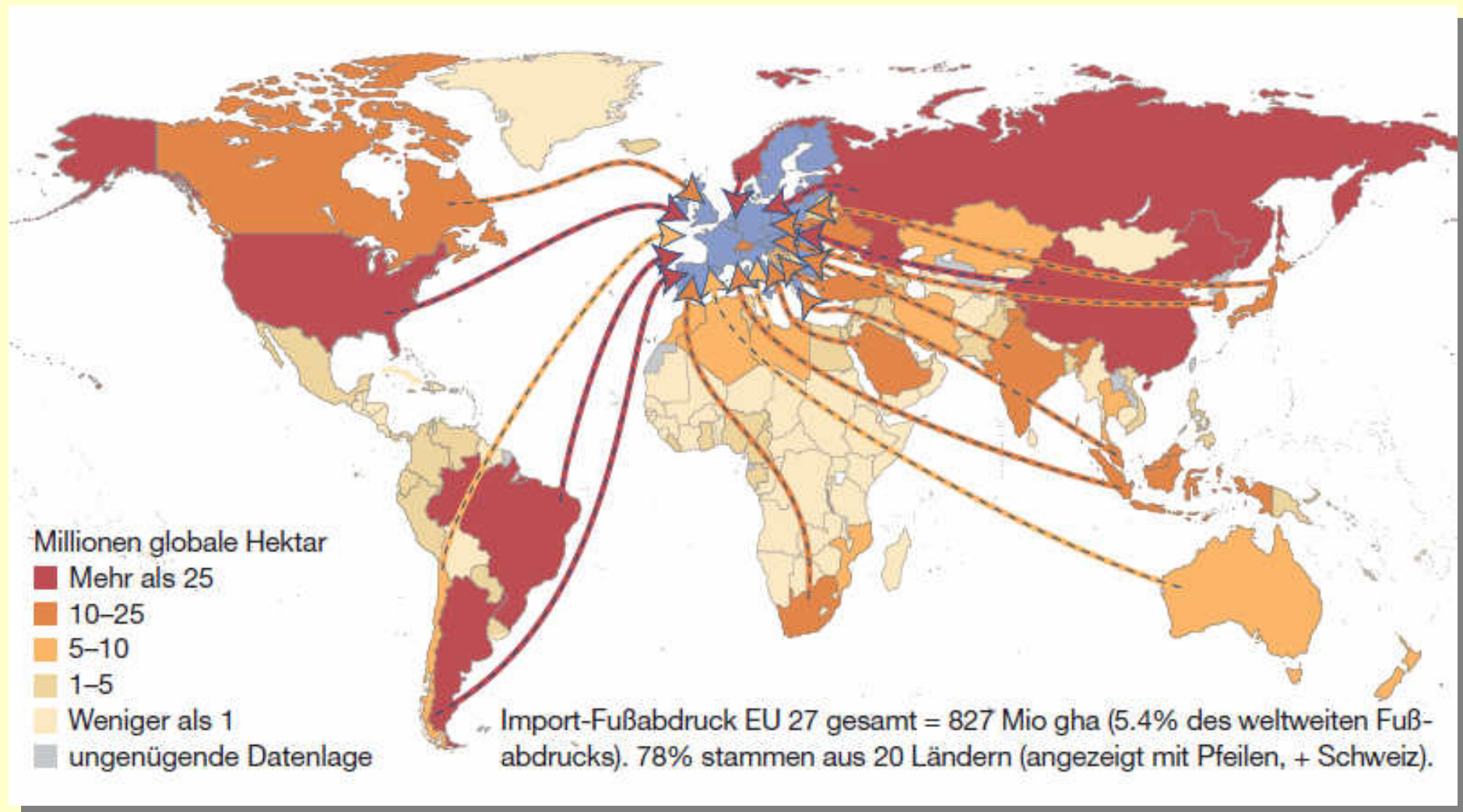


China 0,8 Defizit 0,7

* 2010

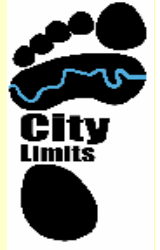
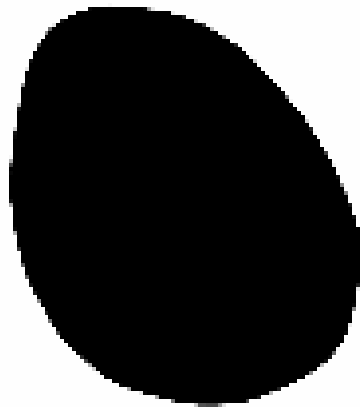
Datenquelle:
Living Planet Report 2006
Datenbasis 2003; Grafik: Schnauss

„Import und Export“ von Flächen





**City
Limits**



Ökologischer Fußabdruck für Städte und Regionen

z.B.

London

Berlin

Hamburg

A graphic summary of the 2002 report

City Limits

A resource flow and ecological footprint analysis of Greater London

In the year 2000 London consumed 49 million tonnes of materials and 154,407 GigaWatt hours (GWh) of energy (or 13,276,000 tonnes of oil equivalent). This produced 41 million tonnes of carbon dioxide. Less than 1% of London's energy came from renewable sources.

6.9 million tonnes of food was consumed in London in 2000, of which 81% was imported from outside the UK.

Water consumption reached 666,000,000 litres of which 28% was leakage.

Download or order the full report from the City Limits website:

www.citylimitslondon.com

Bottled Water
Londoners consume about 24 million litres of bottled water each year. If all the bottles were lined up, they would circle the world 3.5 times. The average Londoner is responsible for about 100kg of plastic waste each year. 700kg per year for French Alps to the UK.

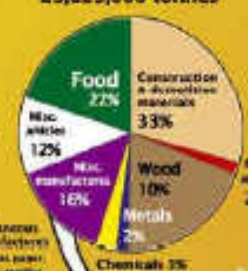
Londoners travelled 64 billion passenger kilometres in 2000, of which 69% was by car.

Carbon Dioxide
40,972,000 tonnes

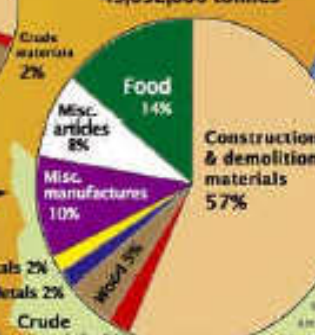
An ecological footprint
is an indicator of the area of land and sea needed to sustainably provide all the energy, water, food and other materials that we consume.



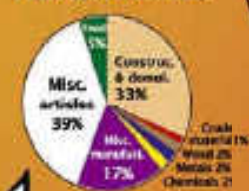
Imports
25,029,000 tonnes



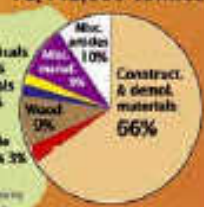
Consumption
(Imports plus Production, less Exports)
49,052,000 tonnes



Exports
14,076,000 tonnes



Stock
16,442,000 tonnes



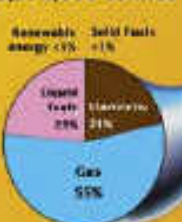
This is equal to 6.63 global hectares per Londoner.



The UK average is 6.3 gha per person. The global 'earthshare' is 2.18 gha per person, but this will drop to about 1.44 gha by 2050.

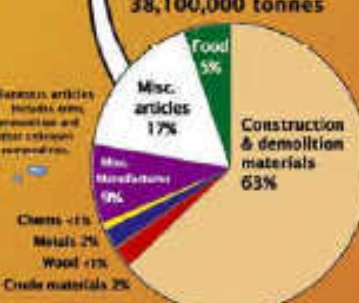
three planets!

Energy inputs
(tonnes of oil equivalent)
13,276,000 tonnes

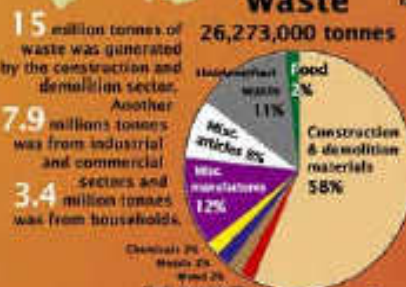


Greater London Economy (2000)

Production
(including reused materials)
38,100,000 tonnes



Waste
26,273,000 tonnes



53% Reused or Recycled

Not all of the footprint is directly attributable to individual action. Government, businesses and others all have an impact.



City Limits used a range of Business-as-usual and Evolutionary scenarios to reflect current practice and existing improvement targets. Revolutionary scenarios were also created to show that a combination of lifestyle and technological changes could achieve interim sustainability targets for 2050.

For Londoners to be sustainable by 2050 their ecological footprint will need a 35% reduction by 2020 and 80% by 2050.

Of household waste: 71% was landfilled, 20% incinerated & 9% was recycled.

Prepared by **Best Foot Forward**

Bringing sustainability down to earth

www.bestfootforward.com



Der Ökologische Fußabdruck von Berlin



218 km Radius

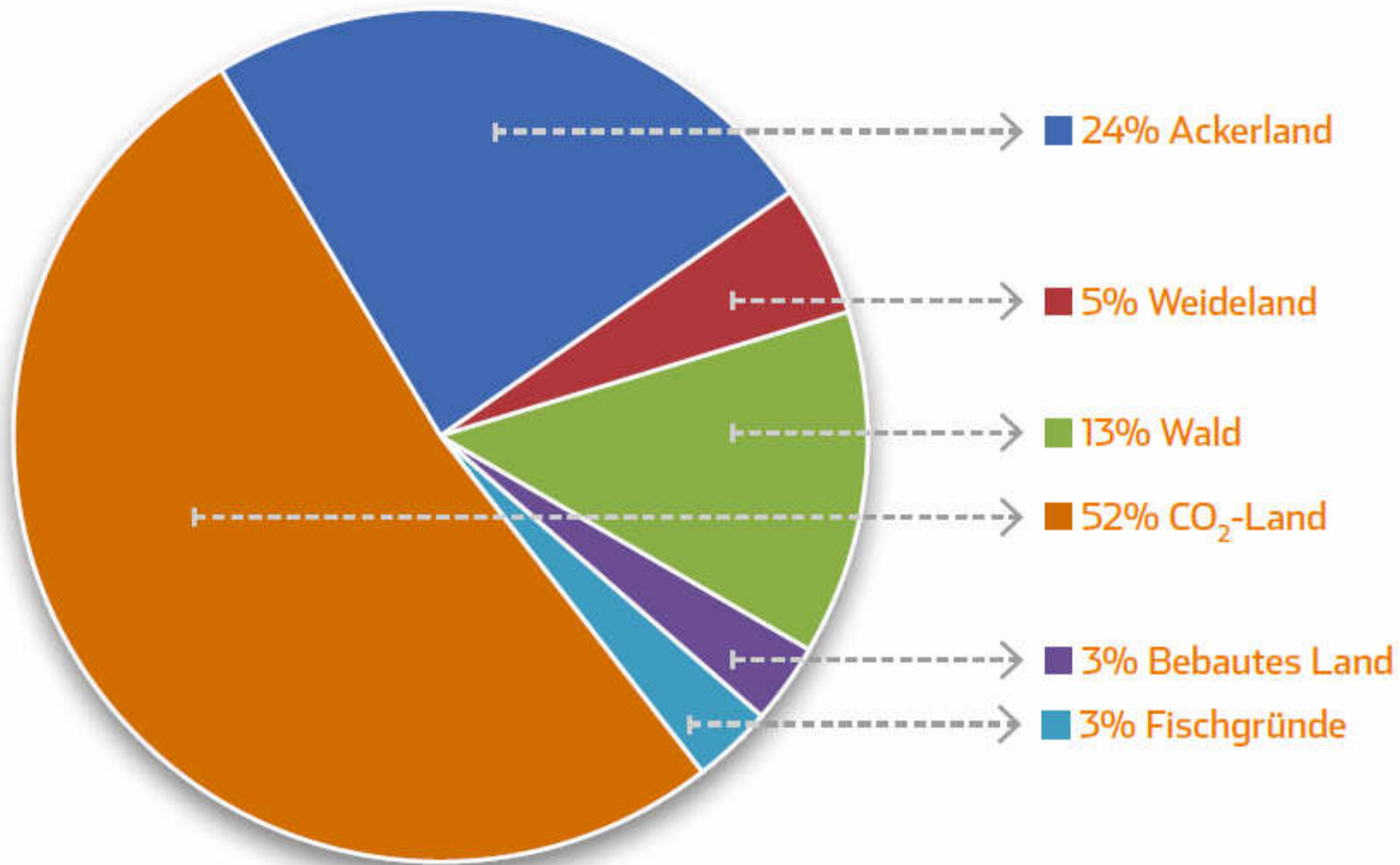
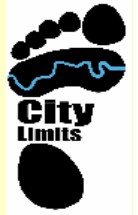
**168-fache
der Stadtfläche**

40% der BRD

4,5 gha/P

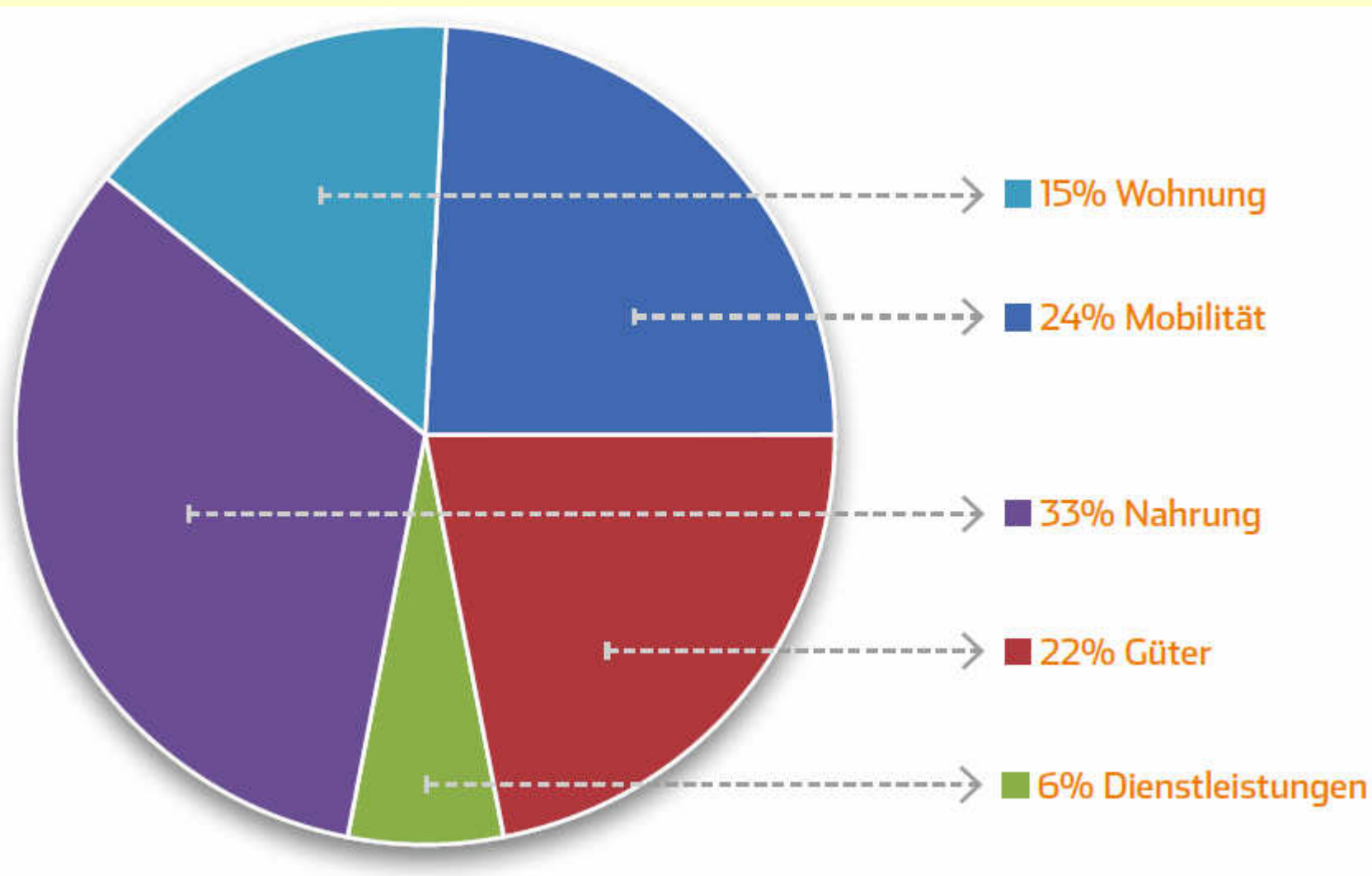
Quelle:
Abgeordnetenhaus Berlin 2001
Autor: Schnauss

Der Ökologische Fußabdruck von Hamburg nach Flächentypen



Quelle: Zukunftsrat Hamburg 2012

Der Ökologische Fußabdruck von Hamburg nach Handlungsfeldern



Quelle: Zukunftsrat Hamburg 2012

Ökologischer Fußabdruck von Aberdeen und Aberdeenshire

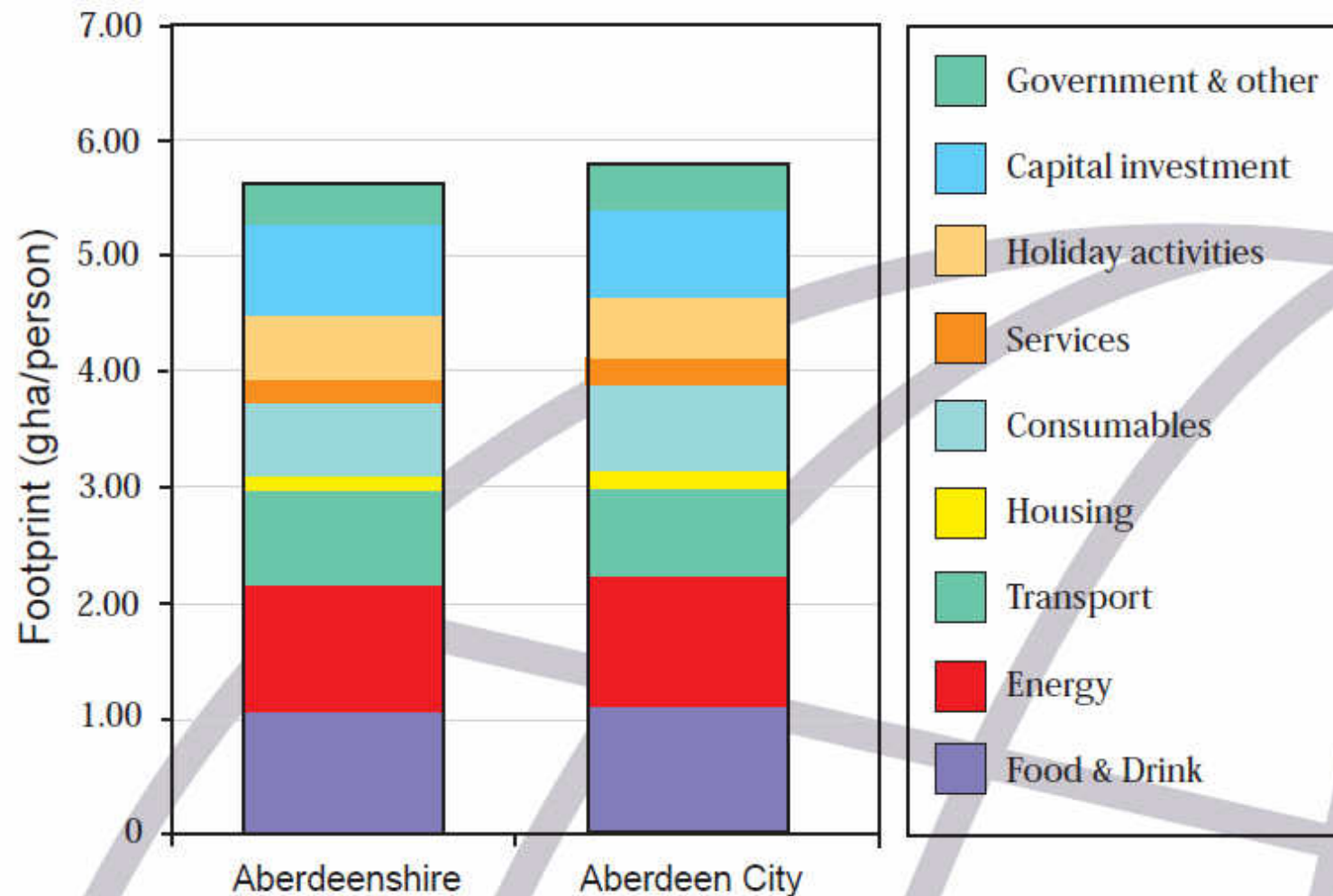


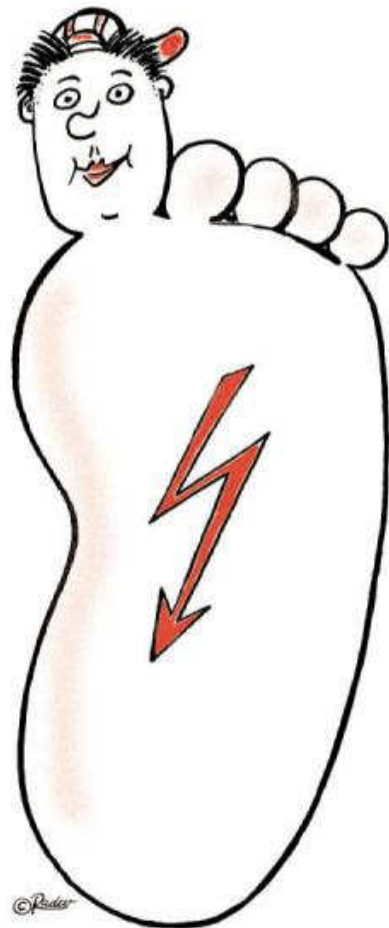
Figure 1 – Aberdeenshire and Aberdeen City's Global Footprint



Ökologischer Fußabdruck von Maßnahmen

Energie-Diät für Öfi

Die **Kalorientabelle** für 1 Kilowattstunde*
unserer Energieträger



Strom „Berliner Mix“
1,6 m²



Öl
0,6 m²



Gas
0,4 m²



Grüner Strom
0,2 m²



Solar-Strom
0,07 m²



Biomasse
0,06 m²



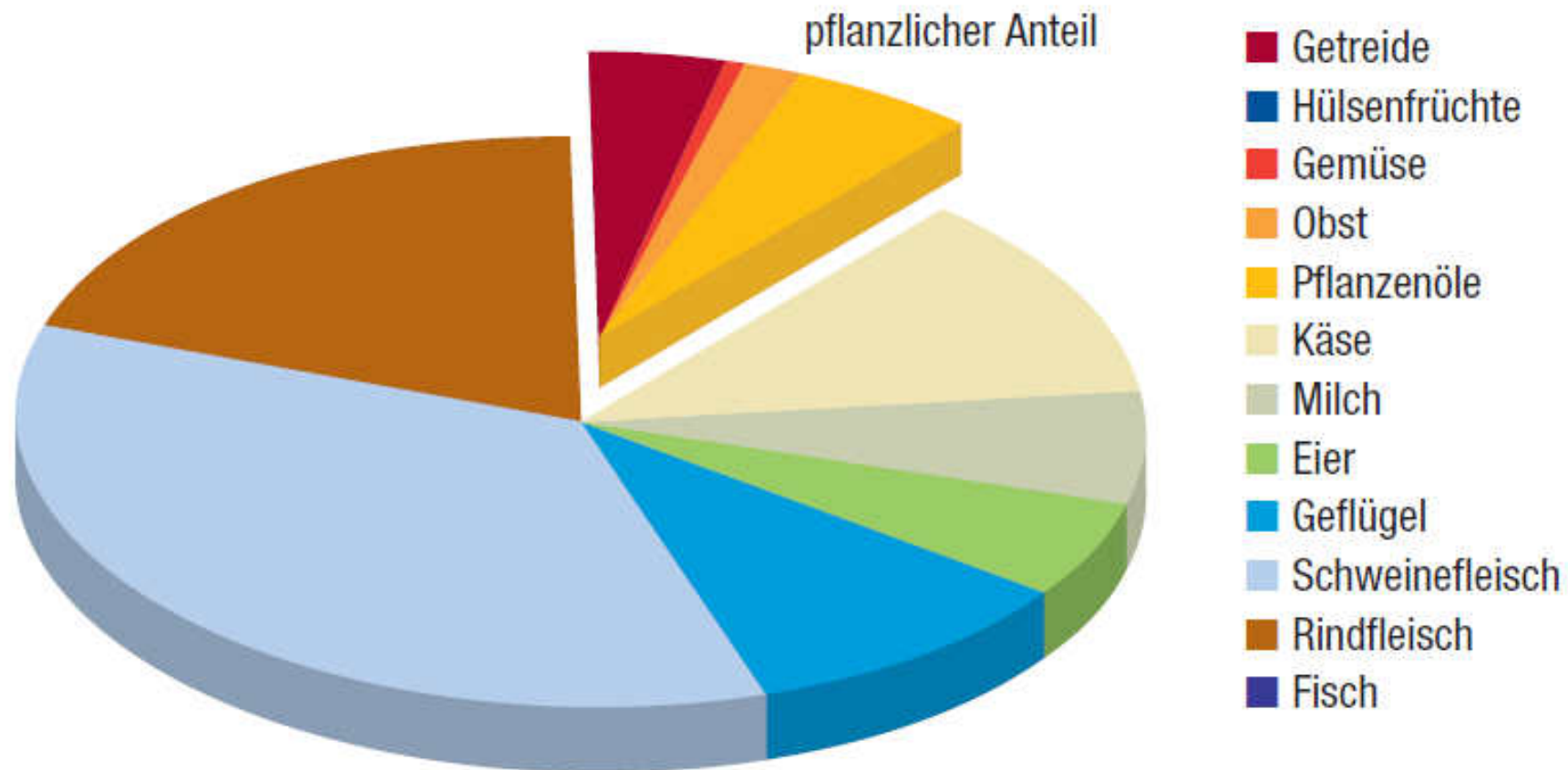
Solar-Wärme
0,03 m²

*1 Kilowattstunde entspricht: 10 Stunden Brennen einer 100 W-Glühlampe



Anteil der Lebensmittel am Footprint der Ernährung

Ernährung gesamt ca. 1,5 gha



Quelle: Ecological Footprint Calculator Austria

FAZIT

Mögliche Anwendungsaspekte Ökologischer Fußabdruck für Brandenburg

Diskussion und Veranschaulichung von:



- **Konsum und Lebensstil**
- **Nachhaltigkeitsbegriff**
- **Verteilungsgerechtigkeit**
regionsbezogen
- **Ressourcenströme**
regionsbezogen

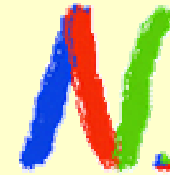
Die natürlichen Lebensgrundlagen von Brandenburg

zu betrachtende Aspekte:



- Wertschätzung
- Eigenbedarf
- „Export / Import“
Flächen-“Markt“
- Flächennutzung
- Wildnisanteil
- Nachwachsende
Rohstoffe
- Flächenentwicklung
- Einfluss des
Klimawandels

Büro für Nachhaltige Entwicklung



**Vielen Dank
für Ihre
Aufmerksamkeit**

Dipl.-Ing. Matthias Schnauss www.nachhaltig-berlin.de www.oekofuss.de